IN THE CLAIMS:

1. (Currently Amended) A system for indexing and manipulating backup data stored on a destination storage system, comprising:

one or more source storage systems configured to transmit the backup data to the destination storage system;

a management client comprising a processor configured to execute a management application ~~executed by a processor~~, ~~wherein~~ the management application ~~is~~ configured to communicate with the destination storage system and further configured to access data identifiers related to the backup data organized in a directory tree ~~structure~~ representing a plurality of persistent consistency point images (PCPIs) of the backup data, wherein each PCPI is associated with a creation time, the management application further configured to scan the directory tree through at least one volume information block configured to reference ~~each~~a root of each PCPI comprising the directory tree to generate an index of directories, files, or qtrees associated with the directory tree, the management application further configured to ~~and~~ organize the data identifiers ~~into a structure that~~to enables the backup data to be displayed on a display screen of the management client; and

a user interface of the management client configured to select a directory, file, or qtree to view, ~~wherein~~ and, in response to the selection, the management client further configured to query the management application ~~is further configured~~ and in response to the query to return a list of the selected directory, file, or qtree and one or more versions of the selected directory, file, or qtree.

2. (Currently Amended) The system as set forth in claim 1 further comprising a database coupled to the management client configured to store~~that stores~~ the data identifiers and rules for handling the data identifiers for retrieval by the user interface and the management application.

3. (Currently Amended) The system as set forth in claim ~~2~~ 1 further comprising, in the destination storage system, a network data management protocol (NDMP) extension

communicating with a storage operating system of the destination storage system and providing NDMP-based communication between the management application and the storage operating system.

4. (Currently Amended) The system as set forth in claim 3 further comprising a job management framework of the management client configured to~~that~~ organize~~s~~ one or more~~a plurality of~~ backup operations and restore operations by the management application and that communicates with the user interface ~~so as to~~ enable a user to access information with respect to status of the backup operations and restore operations organized by the job management framework.

5. (Currently Amended) The system as set forth in claim ~~4~~ 1 further comprising a scheduler of the management client configured to~~that~~ interface~~s~~ with the source storage system, ~~and that~~ perform~~s~~ the backup operations, and transmit~~transmitting~~ the backup data from the source storage system to the destination storage system at a predetermined time interval.

6. (Currently Amended) The system as set forth in claim 1 wherein the display screen of the ~~user interface~~management client is configured to enable ~~comprises a screen that enables~~ a user to set a desired lag time after which failure to complete a scheduled backup operation causes an event to occur.

7. (Currently Amended) The system as set forth in claim 1 wherein~~further comprising~~ the user interface of the management client is further configured to select a listing of source data entries indexed by names of the source storage system and to select another listing of source data entries indexed by names of volumes of the destination storage system in which the backup data ~~from the source data~~ resides.

8. (Currently Amended) The system as set forth in claim 7 wherein the display screen of the management client~~each of the entries of each listing~~ comprises a ~~browse backups~~ button configured to~~that~~ enable~~s~~ a user to view the backup data stored on the destination storage system that is associated respectively with each of the entries.

9. – 11. (Cancelled)

12. (Currently Amended) The system as set forth in claim ~~8~~ 7 wherein the display screen of the management client~~each of the entries of each listing~~ comprises a ~~restore~~ button configured to~~that~~ enable~~s~~ a user to view restorable backup data structures with respect to each of the entries and to restore the backup data structures ~~to the source data~~.

13. (Cancelled)

14. (Currently Amended) The system as set forth in claim 1~~2~~ wherein each qtree comprises one or more qtree relationships with respect to other qtrees within the source storage system.

15. (Currently Amended) The system as set forth in claim 1 wherein the user interface of the management client comprises a command for destroying a qtree relationship between ~~the~~ source data and a selected volume of the backup data in the destination storage system.

16. (Currently Amended) The system as set forth in claim 15 wherein the management application is further configured to delete a respective qtree associated with the qtree relationship on the destination storage system in response to activation of the command for destroying the qtree relationship.

17. (Currently Amended) The system as set forth in claim 1 wherein~~further comprising, in the user interface, a~~ the display screen of the management client is configured to~~that~~ enable~~s~~ selected data of ~~the~~ source data to be listed as entries and to be transmitted as the backup data to the destination storage system at a time separate from a scheduled backup time.

18. (Currently Amended) A computer implemented method for indexing and manipulating backup data stored on a destination storage system from source data stored on a source storage system, comprising:

communicating, by a management client, with the destination storage system and accessing data identifiers related to the backup data organized in a tree structure and representing a plurality of persistent consistency point images (PCPIs) of the data, each with associated information related to a creation time;

scanning the tree structure through at least one volume information block configured to reference each root of each~~the plurality of~~ PCPI~~s~~ comprising the tree structure to generate an index of directories, files, or qtrees created at different points in time;

organizing the data identifiers to~~into a structure that~~ enable~~s~~ the data to be displayed on a display screen of the management client according to the directory, the file, or the qtree; and

selecting, on a user interface of the management client, a specified directory, file, or qtree to view, and, in response to the selection, querying ~~wherein~~ the management client and in response to the query, returning~~returns~~ a list of the ~~selected~~ specified directory, file, or qtree created at different points in time.

19. (Currently Amended) The method as set forth in claim 18 further comprising storing, in a database coupled to the management client, the data identifiers and rules for handling the data identifiers for retrieval by the user interface and the management application.

20. (Currently Amended) The method as set forth in claim ~~19~~ 18 further comprising providing, in the destination storage system, a network data management protocol (NDMP) extension communicating with a storage operating system of the destination storage system and providing NDMP-based communication between the management application and the storage operating system.

21. (Currently Amended) The method as set forth in claim 20 further comprising organizing, in a job management framework of the management client, one or more~~a plurality of~~ backup operations and restore operations by the management application and that communicates with the user interface ~~so as to~~ enable a user to access information with respect to status of the backup operations and restore operations organized by the job management framework.

22. (Currently Amended) The method as set forth in claim 18~~21~~ further comprising interfacing a scheduler of the management client with the source storage system and performing, at scheduled times, backup operations that transmit the backup data from the source storage system to the destination storage system at a predetermined time interval.

23. (Previously Presented) The method as set forth in claim 22 further comprising enabling a user to set a desired lag time after which failure to complete a scheduled backup operation causes an event to occur.

24. (Currently Amended) The method as set forth in claim 18 further comprising selecting ~~(a)~~ a listing of source data entries indexed by names of the source storage system and ~~(b)~~selecting a listing of source data entries indexed by names of volumes of the destination storage system in which the backup data ~~from the source data~~ resides.

25. (Currently Amended) The method as set forth in claim 24 further comprising enabling a user to view, by the display screen of the management client, the backup data stored on the destination storage system that is associated respectively with each of the entries.

26. – 28. (Cancelled)

29. (Currently Amended) The method as set forth in claim 24 further comprising enabling a user to view, by the display screen of the management client, restorable backup data structures with respect to each of the entries and to restore the backup data structures ~~to the source data~~.

30. (Cancelled)

31. (Currently Amended) The method as set forth in claim 18 wherein ~~each~~ one or more of each qtree comprises qtree relationships with respect to other qtrees within the source storage system.

32. (Currently Amended) The method as set forth in claim 18 further comprising providing, by~~in~~ the user interface of the management client, a command for destroying a qtree relationship between source data and a selected volume of the backup data in the destination storage system.

33. (Previously Presented) The method as set forth in claim 32 further comprising, in response to activation of the command for destroying the qtree relationship, deleting a respective qtree associated with the qtree relationship on the destination storage system.

34. (Currently Amended) The method as set forth in claim 18 further comprising providing, ~~in~~ by the display screen~~user interface~~ of the management client, a view~~screen~~ that enables selected data of ~~the~~ source data to be listed as entries and to be transmitted as the

backup data to the destination storage system at a time separate from a scheduled backup time.

35. (Currently Amended) A method for managing backup of data, comprising:

scanning at least one volume information block referencing each root of a plurality of persistent consistency point images (PCPIs) comprising a particular tree structure stored on a destination storage system;

generating, by a management client, an index of qtrees in response to scanning the volume information block referencing each root of the plurality of PCPIs, ~~wherein~~ each qtree comprising~~has~~ one or more versions created at different creation times~~points in time~~;

selecting, by a query issued at the management client, a particular qtree to view of the index of qtrees; and

displaying, on a screen of the management client in response to the query, each version of the particular qtree created at the different ~~points in time~~creation times.

36. (Cancelled)

37. (Previously Presented) The method as set forth in claim 35 further comprising formatting information into a network data management protocol (NDMP).

38. (Currently Amended) The method as set forth in claim 35 further comprising activating, via the user interface, user interface buttons associated with entries of the displayed qtree.

39. (Currently Amended) A computer-readable medium containing executable program instructions executed by a processor, comprising:

program instructions that scan at least one volume information block referencing each root of a plurality of persistent consistency point images (PCPIs) comprising a particular tree structure stored on a destination storage system;

program instructions that generate, by a management client, an index of qtrees in response to scanning the volume information block referencing each root of the plurality of PCPIs, ~~wherein~~ each qtree comprising~~has~~ one or more versions created at different creation times~~points in time~~;

program instructions that select, by a query issued at the management client, a particular qtree to view of the index of qtrees; and

program instructions that display, on a screen of the management client in response to the query, each version of the particular qtree created at the different ~~points in time~~creation times.

40. (Cancelled)

41. (Previously Presented) The computer-readable medium as set forth in claim 39 further comprising program instruction that format information into a network data management protocol (NDMP).

42. (Currently Amended) A system, comprising:

a source storage system configured to generate a plurality of persistent consistency point images (PCPIs) associated with a particular directory tree, and further configured to transfer the plurality of PCPIs to a destination storage system;

a management client comprising a processor configured to execute a management application~~the destination storage system configured to execute a management client~~, ~~wherein~~ the management application~~client is~~ configured to scan the particular directory tree through at least one volume information block configured to reference each root of each PCPI comprising the particular directory tree to organize the plurality of PCPIs into an index using a database operatively connected to the management client configured to

allow the plurality of PCPIs to be displayed on a display screen of the management client as~~in~~ ~~(a)~~ a listing of source data entries indexed by the particular directory tree, ~~wherein~~ each PCPI of the particular directory tree ~~is~~ created at one or more different creation times ~~(b)~~, and to allow the plurality of PCPIs to be displayed on the display screen as a listing of source data entries indexed by names of the source storage system, and ~~(c)~~ to allow the plurality of PCPIs to be displayed on the display screen as a listing of source data entries indexed by names of volumes of the destination storage system in which backup data from the source storage system resides; and

an interface of the management client configured to select a data entry for the particular directory tree, and, in response to the selection, query the management application~~client further configured~~ and in response to the query~~to~~ return a list of the plurality of PCPIs associated with the particular directory tree.

43. – 45. (Cancelled)

46. (Currently Amended) The system of claim 42, wherein the database operatively coupled to the management client is further configured to store~~stores~~ the plurality of PCPIs and rules for handling the plurality of PCPIs for retrieval by the interface and the management client.

47. (Currently Amended) The system of claim 42, wherein the source storage system, upon initialization, is further configured to send~~sends~~ a base PCPI and select data to the destination storage system.

48. (Currently Amended) The system of claim 42, further comprising a scheduler of the management client configured to~~that~~ interfaces with the source storage system and performs one or more backup operations of transmitting the backup data comprising one or more PCPIs and change data from the source storage system to the destination storage system at a predetermined time interval.

49. (Currently Amended) A computer implemented method, comprising:

transferring a plurality of persistent consistency point images (PCPIs) from a plurality of source ~~servers~~ storage system to at least one destination storage system;

scanning at least one volume information block referencing each root of the plurality of PCPIs comprising a particular directory tree to create an index of data structures ~~on~~ of the at least one destination storage system, ~~wherein~~ each data structure comprising ~~comprises~~ a plurality of qtree versions ~~each~~ created at different creation times~~points in time~~;

selecting a particular data structure to view;

in response to the selection, querying the destination storage system, and in response to the querying, returning all qtree versions created at the different ~~points in time~~ creation times for the particular data structure; and

selecting a particular qtree from all the returned qtree versions created at the different creation times~~points in time~~ to restore.

50. (Currently Amended) A system, comprising:

at least one source ~~server~~ storage system configured to transfer a plurality of persistent consistency point images (PCPIs) to at least one destination storage system;

a management client comprising a processor configured to execute a management application, the management application configured to ~~executed by a processor configured to~~ scan a directory tree through at least one volume information block configured to reference each root of each PCPI comprising the directory tree~~the plurality of PCPIs~~ to create an index of data structures of~~on~~ the at least one destination storage system, ~~wherein~~ each data structure comprising~~comprises~~ a plurality of qtree versions each created at different ~~points in time~~creation times;

the management application further configured to select a particular data structure to view and, in response to the selection, query the management application ~~further configured~~ and in response to the query~~to~~ return all qtree versions created at the different ~~points in time~~creation times for the particular data structure; and

a user interface of the management client configured to display on a display screen of the management client all the returned qtree versions created at the different ~~points in time~~creation times, and further configured to allow a user to select a particular qtree from all the returned qtree versions to restore.